

Western Great Basin 2002 Fire Season Overview

Weather and Fuels

For the fourth year in a row, Nevada entered the fire season with a precipitation deficit. NOAA's U.S. Drought Monitor classified the state as being in varying stages of drought for the entire fire season, with indices ranging from moderate to severe in the north and severe to extreme in the south. Winter temperatures for most of the state were near normal, but along the Sierra Front the average temperature was up to four degrees above normal for the same period.

As winter ended, the load of residual fuels was lighter and more matted than in previous years. With winter precipitation and snow pack lacking in most areas, germination in the grasses occurred later this year and the growing period to formation of seed heads was shorter; both of these factors resulted in less growth in the fine fuels.

Warmer than normal temperatures in spring and early summer served to accelerate the curing and drying process of all fuels. Live vegetation in central and southern Nevada was showing stress from drought conditions as early as the end of May. The Energy Release Component (ERC) Index and the 1,000-hour fuel values both verified the dry conditions as they exceeded the 97th percentile, and in some cases the 10 year maximum values, in late June and early July. This trend continued off and on into August, then the values dropped back toward normal.

Despite the extreme conditions of the woody fuels, the absence of a high, continuous bed of fine fuels was a definite factor in moderating the number of large fires. A persistent southwest flow in the upper atmosphere did not allow the usual monsoonal thunderstorm activity to occur over the state in July and August. Except for one system which brought widespread lightning from July 12-14, most storms tended to be more localized and produced fewer ignitions. This year's thunderstorms also tended to be wetter, resulting from a series of low pressure systems in the southwest flow; this helped to limit fire spread and allowed for more successful initial attack.

Large Fire Activity

With heavy fire activity occurring throughout the West, even fewer resources were available for prepositioning and active fires than in previous years. Despite this, initial attack efforts were successful 96% of the time, with only 4% of the fires reaching 300+ acres in size.

All but six of this year's large fires were lightning caused. The first three large fires of the year began on June 1st on Ely BLM land. The next spurt in large fire activity occurred from July 12-14, when dry lightning touched off numerous large fires throughout the state; roughly one-half of the large fires and acres burned for the year resulted from these storms. The last large fire of the season was contained on September 30th. By that date, 31 large fires had burned a total of 81,586 acres (all agencies plus private). This compares to an average of 63 large fires occurring each year from 1997 to 2001. As is generally the case, large fires made up the majority of the total acreage burned; in 2002, large fires accounted for 95% of the total acres burned.

Large fire workload by dispatch center was as follows:

<u>Dispatch Center</u>	<u># of Large Fires</u>	<u># of Acres Burned</u>
Elko Interagency Dispatch Center	4	2,464
Central Nevada Interagency Dispatch Center	7	14,517
Sierra Front Interagency Dispatch Center	8	40,024
Ely Interagency Communication Center	10	19,541
Las Vegas Interagency Communication Center	2	5,040

Incident Management Teams

The total number of Incident Management Team (IMT) assignments within the Western Great Basin Area in 2002 remained consistent with team usage in the 2001 season. In all, 4 Type 1 IMTs were ordered, 7 Type 2 IMT assignments occurred, and 6 Type 3 IMTs were assigned within the Area. Whereas all but 2 of the orders in 2001 were for Type 2 IMTs, the 2002 season showed increased utilization of Type 1 and 3 IMTs. Teams from outside of the Great Basin filled 4 of these assignments (for a total of 31 days).

Western Great Basin incidents with Incident Management Teams assigned can be broken down as follows:

<u>Agency</u>	<u># of Large Fires</u>	<u># of Team Assignments</u>
Bureau of Land Management (BLM)	22	6
U.S. Forest Service (USFS)	8	11
Department of Energy (DOE)	1	0

Historical Comparison

Of the last five years, the 1998 season is mostly closely correlated with the 2002 fire occurrence statistics. Although the number of fires was slightly higher in 2002, the total acreage burned and number of large fires was roughly the same as in the 1998 season. At 783, the total number of fires was 78% of the 5-year average of 1,009 fires, while the total of 86,079 acres burned was 13% of the 5-year average of 671,227 acres¹.

¹ The 2002 occurrence statistics include 12 Wildland Fire Use incidents for a total of 8,528 acres.

Western Great Basin Area
2002 Fire Statistical Summary
(as of 12/3/02)

Unit/Agency	Fires by Cause		Acres by Cause		Total Fires	Total Acres
	Human	Lightning	Human	Lightning		
Eastern Nevada Agency	0	0	0	0	0	0
Western Nevada Agency	8	2	315	1	10	316
Duck Valley Tribe	0	13	0	118	13	118
Bureau of Indian Affairs/Tribes	8	15	315	119	23	434
Elko Field Office	10	56	980	1,670	66	2,650
Winnemucca Field Office	34	33	2,503	12,595	67	15,098
Carson City Field Office	32	86	379	3,513	118	3,892
Ely Field Office	11	154	1,021	10,457	165	11,478
Las Vegas Field Office	15	11	26	1	26	27
Battle Mountain Field Office	10	47	148	856	57	1,004
Bureau of Land Management*	112	387	5,057	29,092	499	34,149
Ruby Lake NWR	0	0	0	0	0	0
Fallon & Stillwater NWRs	0	0	0	0	0	0
Pahranagat, Desert, Ash Meadows & Moapa NWRs	3	0	80	0	3	80
U.S. Fish and Wildlife Service	3	0	80	0	3	80
Great Basin National Park	0	3	0	0	3	0
Lake Mead NRA	9	0	6	0	9	6
National Park Service	9	3	6	0	12	6
Northern Region	24	23	80	26	47	106
Western Region	30	4	9	1	34	10
Southern Region	0	0	0	0	0	0
Nevada Division of Forestry**	54	27	89	27	81	116
Humboldt-Toiyabe NF (Elko area)	2	5	8	431	7	439
Humboldt-Toiyabe NF (Winnemucca area)	3	0	3	0	3	3
Humboldt-Toiyabe NF (Sierra Front & central NV)	14	83	23,029	13,611	97	36,640
Humboldt-Toiyabe NF (Ely area)	0	10	0	677	10	677
Humboldt-Toiyabe NF (Las Vegas area)	9	26	1	4,306	35	4,307
U.S. Forest Service	28	124	23,041	19,025	152	42,066
Department of Defense (Nellis AFB)	0	0	0	0	0	0
Department of Energy (Nevada Test Site)	1	0	700	0	1	700
Other Federal	1	0	700	0	1	700
Geographic Area Totals	215	556	29,288	48,263	771	77,551

*BLM totals include 10,226 acres of private and other agency lands burned on BLM fires.

2002 Prescribed Fire Activity

Agency/Unit	Prescribed Fire/Mechanical		Wildland Fire Use	
	Fires	Acres	Fires	Acres
Eastern Nevada Agency	0	0	0	0
Bureau of Indian Affairs	0	0	0	0
Elko Field Office	9	11,726 ¹	0	0
Winnemucca Field Office	16	1,010 ²	0	0
Carson City Field Office	8	254	0	0
Ely Field Office	6	19	12	8,528 ³
Las Vegas Field Office	8	157	0	0
Battle Mountain Field Office	2	1,401	0	0
Bureau of Land Management	49	14,567	12	8,528
Ruby Lake NWR	0	0	0	0
Pahranagat/Desert NWRs	2	480	0	0
U.S. Fish and Wildlife Service	2	480	0	0
Great Basin NP	0	0	0	0
Lake Mead NRA	8	814	0	0
National Park Service	8	814	0	0
Northern Region	0	0	0	0
Western Region	0	0	0	0
Southern Region	0	0	0	0
Nevada Division of Forestry	0	0	0	0
Humboldt-Toiyabe NF	5	172	0	0
U.S. Forest Service	5	172	0	0
Geographic Area Totals	64	16,033	12	8,528

¹ Includes 530 other acres burned.

² Includes 265 other acres burned.

³ Includes 624 other acres burned.

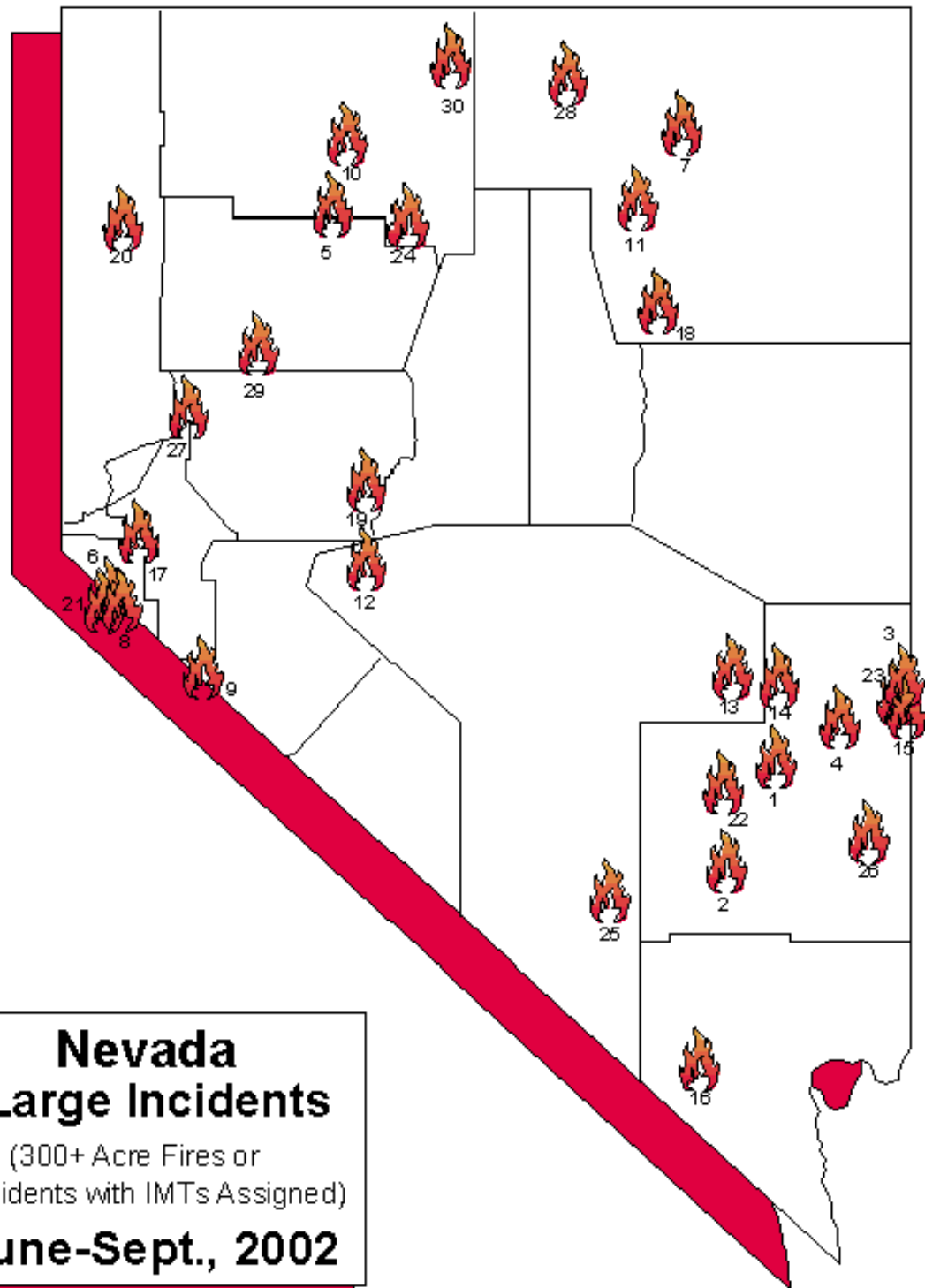
Western Great Basin Large Fires for 2002

Dispatch Center	Map Ref #	Incident Name	Number	Agency	Latitude	Longitude	Size	Contain Date	IMT Assigned	IMT Type	Cause	Significant Impacts
EIDC	7	Double Mountain	Z516	BLM-EKD	41 24 39	115 40 47	450	7/8/02			Lightning	
	11	Adobe	J004	BLM-EKD	40 50 58	115 52 08	440	7/14/02			Lightning	Threat to wildlife habitat, Sundown Subdivision, and power line. Closed northbound SR 225 (Mtn. City Hwy).
	18	Belmont	P44708	USFS-HTF	40 09 39	115 40 23	639	7/15/02			Lightning	Threat to a ranch and wildlife habitat.
	28	Nelson Field	J050	BLM-EKD	41 35 33	116 22 06	875	9/21/02			Human	
CNIDC	5	MM 161	X358	BLM-WID	40 51 23	117 57 12	528	6/17/02			Human	Temporary closure of I-80 and rail line.
	10	Mud Springs	X374	BLM-WID	41 15 51	117 50 23	10,140	7/14/02	Marfil	3	Lightning	Threats to range land and the historical mine site of Davey Town.
	20	Tin Canyon	X375	BLM-WID	40 46 25	119 39 57	966	7/20/02			Lightning	Threats to horse, burro, deer and antelope habitat.
	30	Chimney	X378	BLM-WID	41 19 26	117 11 21	303	7/14/02			Lightning	
	24	China	X393	BLM-WID	40 34 27	117 29 08	448	8/16/02			Human	Threats to mule deer habitat, China Creek watershed, and grazing allotments.
	27	Two Tips	X415	BLM-WID	39 44 14	119 06 27	970	9/17/02			Lightning	
	29	Toulon	X416	BLM-WID	40 03 10	118 38 12	1,162	9/30/02			Human	
SFIDC	6	Cannon	P47532	USFS-HTF	38 38 39	119 29 50	22,750	6/28/02	Murphy Stutler	2 1	Human	3 fatalities from the crash of airtanker 130. 1 residence and 3 outbuildings destroyed. 1,200 people evacuated from the communities of Walker and Camp Antelope, CA.
	8	Gate Complex: Gate Coleville Slinkard Buckeye	P47570	USFS-HTF	38 35 06	119 31 29	9,866: 315 37 8653 861	7/19/02	Marfil Terwilliger (SF) Lohrey	3 2 1	Lightning	2 outbuildings destroyed. 250 residences, 25 commercial properties and 125 outbuildings threatened in the communities of Coleville, Topaz, Palmer, Holbrook and Double Springs. Threat to critical fisheries habitat and historical sites.
	17	Buckeye (part of Gate Complex)	X820	BLM-CCD	38 57 50	119 29 44		7/19/02			Lightning	
	9	Pan	P47571	USFS-HTF	38 23 53	119 13 18	506	7/16/02	Saleen	2	Lightning	Threat to Monte Vista Mine, historic structures, 3 ranches, a large dairy, 4 outbuildings, 1,500+ cattle, and grazing lands.
	12	Ellsworth	P47599	USFS-HTF	39 54 14	117 48 15	4,339	7/22/02	DeBaun Van Bruggen	3 2	Lightning	Threat to Ellsworth historical site and watershed.
	19	Pony Express 2	X816	BLM-CCD	39 17 12	117 47 36	2,000	7/21/02	Marfil	3	Lightning	Threat to range land.
	21	Silver 2	X866	BLM-CCD	38 35 42	119 36 33	600	8/1/02	Terwilliger (SF)	2	Lightning	6 historic cabins threatened, along with lahontan cutthroat trout habitat, crucial deer winter habitat, the Carson Iceberg Wilderness and BLM WSA, and \$3 million restoration project in Bagley Valley.

Western Great Basin Large Fires for 2002

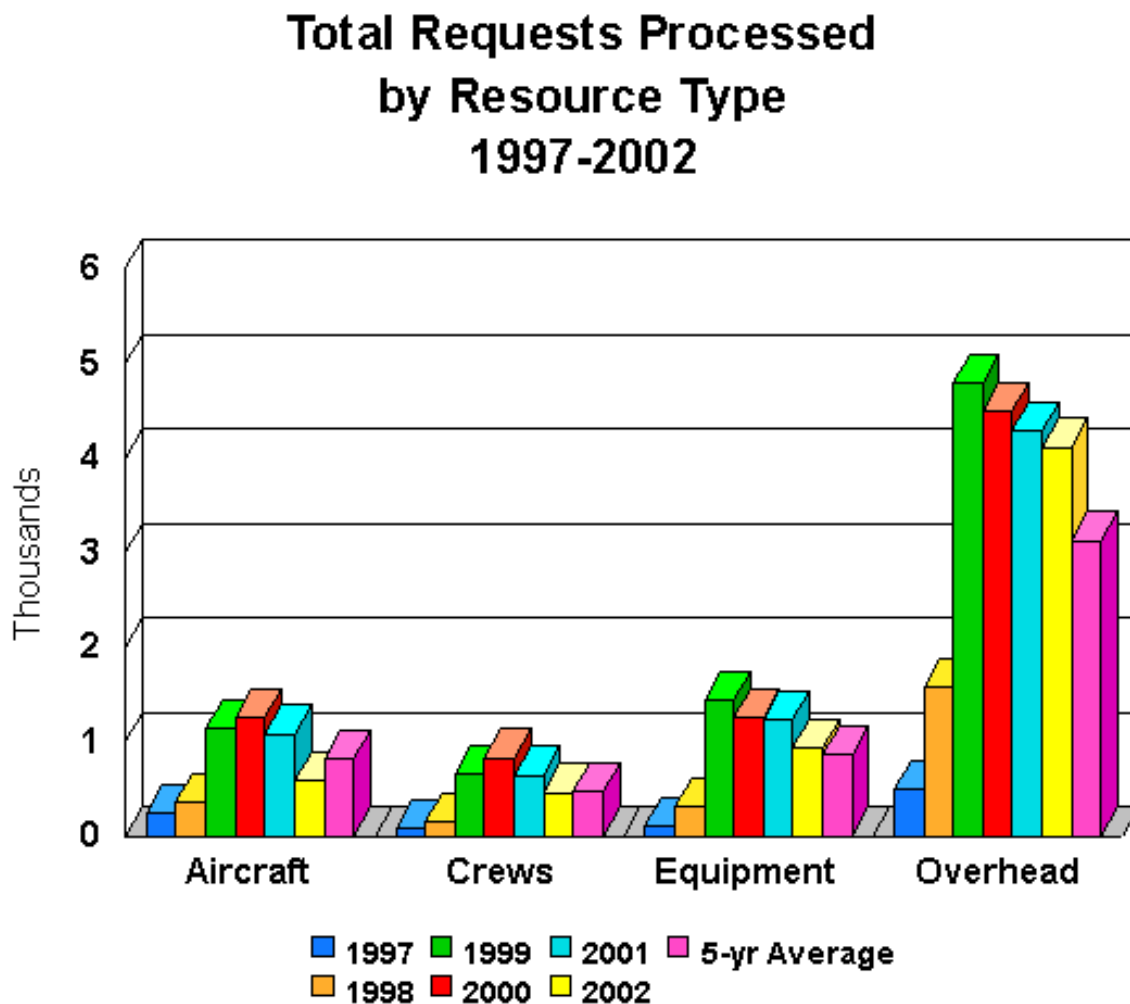
Dispatch Center	Map Ref #	Incident Name	Number	Agency	Latitude	Longitude	Size	Contain Date	IMT Assigned	IMT Type	Cause	Significant Impacts
EICC	1	North Pahroc	Y109	BLM-ELD	37 49 04	114 54 00	2,079	6/4/02			Lightning	
	2	Gregerson	Y110	BLM-ELD	37 06 15	114 40 28	300	6/3/02			Lightning	
	3	Parsnip	Y012	BLM-ELD	38 13 20	114 02 37	1,140	6/7/02			Lightning	3 unoccupied structures were threatened.
	4	Pioche	Y119	BLM-ELD	37 55 34	114 26 09	948	6/11/02	Murphy	2	Human	1 residence and 6 outbuildings destroyed on the outskirts of Pioche, NV.
	13	Cold Springs	P44813	USFS-HTF	38 17 32	115 23 48	597	7/14/02			Lightning	Threat to critical deer winter range and livestock allotments.
	14	Coyote Wash	Y138	BLM-ELD	38 07 30	114 45 36	351	7/13/02			Lightning	Threats to grazing and recreation.
	15	Eagle	Y133	BLM-ELD	38 00 42	114 08 59	8,527	7/19/02	Hefner	1	Lightning	33 residences, 3 commercial properties, and 12 outbuildings threatened. Evacuation of residences in Utah.
	22	Mail Summit	Y158	BLM-ELD	37 40 27	115 15 59	1,010	7/26/02			Lightning	
	23	Buster	Y168	BLM-ELD	38 06 16	114 15 41	4,214	8/6/02	Loucks (ID)	3	Lightning	Threat to sage grouse habitat.
	26	Cottonwood	Y066	BLM-ELD	37 21 00	114 24 00	375	8/24/02			Lightning	
LVICC	16	Lost Cabin	P47837	USFS-HTF	36 07 42	115 38 54	4,340	7/20/02	Maner (CA) Vail (Type 1 -CA) - mobilized but not assigned	2	Lightning	460 residences, 13 commercial properties, and 200 outbuildings potentially threatened. Torino Ranch and Coal Springs evacuated. Lovell Canyon Rd. closed. Red Rocks NCA closed to hikers. HTF south of Mt. Charleston closed to recreationists. Size includes 40 acres of private land burned.
	25	NTS Assist		DOE-NTE	37 10 00	116 11 00	700	8/18/02			Human	Nevada Test Site - assist to county/local dept.

Western Great Basin Coordination Center Large Fires for 2002



Western Great Basin Coordination Center

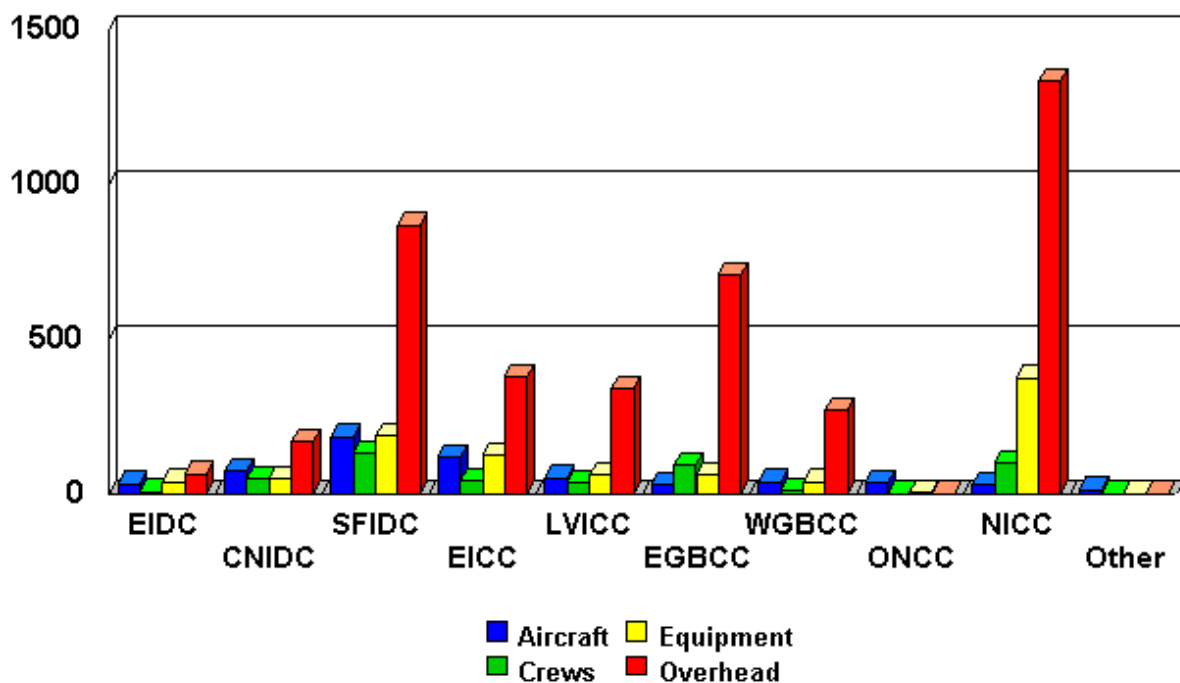
2002 Workload Measures



**Total Resource Requests Processed by Year
1997-2002**

Year	Aircraft	Crews	Equipment	Overhead	Total
1997	240	84	109	501	934
1998	353	141	304	1,576	2,374
1999	1,133	660	1,434	4,783	8,010
2000	1,249	825	1,255	4,499	7,828
2001	1,081	641	1,233	4,278	7,233
2002	592	457	925	4,116	6,090
5-yr. Average	811	470	867	3,127	5,276

Total Resource Requests by Ordering Office and Resource Type 2002



Total Resource Requests Processed (by Resource Type and Office Placing the Order) 2002					
Dispatch Center	Aircraft	Crews	Equipment	Overhead	Total
EI DC	32	5	37	63	137
CNI DC	71	47	45	166	329
SFI DC	184	131	187	868	1,370
EI CC	115	40	125	376	656
LVI CC	50	33	61	339	483
EGBCC	28	93	59	706	886
WGBCC	37	10	38	267	352
ONCC	34	0	1	0	35
NI CC	29	98	372	1,331	1,830
Other*	12	0	0	0	12
Totals	592	457	925	4,116	6,090

* "Other" includes the BLM Boise Smokejumpers, Boise I nteragency Logistics Center, NWCC, SWCC, and OSCC.

Note: All statistics are for orders processed through the Western Great Basin Coordination Center only. They do not include dispatches on home units or to neighboring units under initial attack agreements (if less than 24 hours in duration). Supply orders are not included.